



Letters to the Editor

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Quality of Death Certificates: Studying or Burying?

The editorial by Moriyama¹ discusses important issues regarding the death certificate. We illustrate, using data on deaths related to choking on food, another limitation of the death certificate, its poor level of completion.

We reviewed death certificates, and autopsy reports when available, for deaths that occurred among Georgia residents in 1982 and 1983, and for which the immediate cause of death had been coded as choking on food (ICD-9 code E911).² We characterized demographic variables, immediate and underlying cause of death, and circumstances of injury by degree of completeness of death certificate information.

During the study period, 156 Georgia residents died following choking on food. Name, sex, race, birth date, date of death, place of death certification, and place of residence were available for all deaths. Occupational information was unknown in three certificates (2 percent). In 16 certificates (10 percent) handwriting was illegible in the cause-of-death section. Another 10 percent of certificates did not state whether the food was inhaled during a meal, or was part of the stomach content inhaled following vomiting. Delay between choking and report of death occurred in 32 percent of deaths; date was missing in 47 percent; time of death was missing in 73 percent; and place of occurrence

of choking was missing in 60 percent.

Although 65 certificates mentioned an autopsy, we were able to review only 46 autopsy reports. All information in the autopsy report had been used on the certificate in only 15 deaths (33 percent). Forty-nine diagnoses other than choking appeared on the autopsy reports; only 18 (37 percent) were transcribed on the certificate. Nineteen untranscribed diagnoses (61 percent) could have been responsible for the choking (including seven alcohol and four drug intoxications).

The dual function of death certification is not always recognized. For epidemiologists, the death certificate is a surveillance and research tool, but the main function of the death registration is to allow the body to be buried.³ This can be done promptly, because the necessary demographic information is readily available. On the other hand, completion of the "epidemiologic" section requires the certifier to seek information from appropriate sources, which could delay burial arrangements. Consequently, certifiers rarely amend the certificate when new information becomes available, and are seldom queried about incomplete certificates.⁴

Should we have two death certificates? One, including only demographic information, would provide a way to quickly register the death; the other, an investigation form filled by qualified certifiers, could be completed at a later date. Useful death certification will be achieved only with properly trained, paid, and evaluated certifiers.

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Response from Dr. Moriyama

Salmi, *et al*, demonstrate the inadequacy of information on the death certificate for the study of factors involved in deaths resulting from choking on food. Because the main function of death registration is to facilitate the disposal of the remains, they suggest that one death certificate, including only demographic information, be filed promptly to permit burial as soon as possible. The other investigative form would be completed by a "qualified" certifier at a later date to allow more time to seek epidemiological information from appropriate sources.

This is indeed the legal procedure in most countries. The next of kin is responsible for informing the registration authority of the death and the death is so registered. The medical information is supplied by the physician in attendance, if any, on a separate statistical form to be submitted for the national compilation of mortality statistics. In some countries, like the United States, a single form combining demographic with medical data is filed as a registration document by persons other than a family member.

Many countries require that a death be registered before a burial permit is issued. Also, the death must be ascribed to natural causes by the attending physician in countries with a medico-legal system. Otherwise, the case is referred to the coroner or medical examiner for certification of the